RECLAMATION DISTRICT NO. 2024

235 East Weber Avenue P.O. Box 1461 Stockton California 95201 (209) 465-5883 FAX (209) 465-3956

Trustees

Robert Cecchini John R Jackson Stan Nunn

Don Wagenet

Secretary and Attorney Dante John Nomellini

District Engineer Dominick Gulli

Department Of Water Resources (DWR)

1416 Ninth Street Room 1601 Sacramento CA 94236-0001

PO Box 942836

12/21/11

Phone 916-651-0855 Fax: 916-651-9678

Attn: A Felipe Garcia

afgarcia@water.ca.gov

Re:

Reclamation District 2024 Orwood and Palm Tract

Work Agreement OP-10-1.0 Scope of Work (SOW)

Introduction:

The project defined in this Scope of Work (SOW) consists of upgrading the Orwood Tract Levee by: (1) Installing portions of the PL84-99 slope (2) Installing seepage and stability berms (3) construction of a setback back levee to allow for waterside plantings for habitat enhancement; (4) providing stockpiles of emergency levee materials (Riprap and Aggregate Base (AB)) and (5) planting habitat. The general scope of services is consistent to that outlined in the Proposal Solicitation Package (PSP) submitted to Department of Water Resources (DWR) as amended on April 2, 2010. Levee materials will be imported to the jobsite with trucks or barges.

Since the time of the PSP submittal, the District has made progress toward its 5 year plan by surveying more detailed cross sections to supplement the Lidar data provided by DWR. The Department of Fish and Game (DFG) habitat logs have been input into a spreadsheet, and a better determination of assets protected and areas of concern has been made. The District has performed levee construction and maintenance with the installation of seepage stability berms between levee stations 134+00 and 142+00. This work is partially funded through the DWR subventions program.

Personnel:

DWR Project Engineer:

District Engineer:

Construction Manager

A Felipe Garcia

Dominick Gulli PE, PLS

Kieldsen, Sinnock and Neudeck, Inc.

Chris Neudeck PE

1 of 7

District Secretary DFG Representative CEQA Consultant Dante John Nomellini

Mark Philipp Kleinfelder

Trevor Smith

Environmental Biologist

Moore Biological Diane Moore

Work and Services:

The work consists of levee repairs including stability and seepage berms, landside back slope work toward the PL 84-99 slope, a setback levee to allow Habitat Enhancement along the waterside of the levee, planting of trees and emergency material stockpiles. Following are the procedures to be used to construct the works.

- A majority of the existing topography has been completed.
- A field visit with the DFG Representative has been made to determine any potential AB 360 impacts.
- Environmental consultants have been retained to assist with CEQA compliance and endangered species avoidance measures.
- Cross section data will be used to calculate quantities.
- Plans and specifications will be prepared.
- The Notice to Contractors will be published in a public newspaper in accordance with the public contracting code.
- The Notice to Contractors will also be forwarded to prospective contractors.
- A job walk will be held to show the project to prospective contractors.
- Addendums will be issued if clarification on the plans and specifications is required.
- The bids will be received and opened in public.
- The bids will be reviewed for completeness by the Project Engineer, District Engineer and District Secretary.
- · A contract will be awarded to the lowest responsible bidder.
- Upon receipt of the required contract documents, a Notice to Proceed will be issued to the contractor.
- The improvements will be staked by the Project Engineer.
- All construction material such as import fill, rip rap and aggregate base will be delivered
 to the work site by truck or marine equipment, and will be paid for by the ton.
- The Construction Manager will ensure that the project is being constructed per the plans and specifications.
- Contractor progress payments will be reviewed on a monthly basis by the Engineers and reported to the District and DWR for payment.
- An as-built report will be prepared at the conclusion of each completed portion of the work.
- The District shall not deviate from this SOW without prior consultation with DWR and Department of Fish and Game staff.
- The work will be performed in accordance with the public contracting code.
- The District has consulted with the DWR and DFG on the plant list and spacing. District will coordinate with DWR and DFG as to the specific locations for planting each plant species.

Work Areas:

The PSP work areas originally proposed will be the basis of the scope of work. Enclosed is a map illustrating the work areas.

The Work Areas are specified as follows:

Lower Lifts of PL 84-99 Slopes Work Area 1

The lower lifts of the PL84-99 toe berm/slope will be installed in approximate 4 ft thick lifts at a rate of about 12-16 tons/lf. The practice is to allow a complete lift to rest for a minimum of 15-30 days to monitor prior to placing additional lifts. Rip Rap slope protection will be placed within the work areas above the ordinary high water mark.

Levee Stations 36+00 to 44+00 and 120+00 to 186+00 Length = 7,400 lf

Seepage and Stability Toe Berms Work Area 2

Toe berms will be constructed to provide levee stability and better seepage control.

Stations 70+00 to 110+00 and 175+00 to 190+00 Length = 1,900 if

Habitat Enhancement Work Area 3

An oversized "setback levee" will be constructed between levee stations 120+00 to 130+00 that will shift the PL 84-99 template landward to allow tree plantings outside of the PL84-99 levee template. The trees will be planted within slope protection above the OHWM as per conditions approved with the DFG Streambed Alteration Agreement. Quarry stone slope protection will be used to protect the habitat area and the vegetation it supports. These trees will provide shaded riverine aquatic habitat enhancement. District has consulted with DWR and DFG regarding the plant list and any changes will be subject to the approval of DWR and DFG. District will coordinate with DWR and DFG as to the specific locations for planting each plant species. The oversized levee will enhance emergency preparation by providing better access for trucks, more room for flood fighting including repair of beaver holes and increase the ability to raise the levee during flood fights while maintaining two way access.

The project solicitation package was based on the PL 84-99 slope being constructed. The completion of all work is dependent upon funding, permitting, and contract completion date constraints. The District will coordinate with the DWR and DFG to satisfactorily implement this project component.

The fill will be placed in lifts similar to the PL 84-99 slope described above.

Emergency Preparation Work Area 4

The District will stockpile materials for potential future emergency levee conditions. Quarry Stone Rip Rap and Aggregate base will be stockpiled near levee station 132+00.

Ancillary Work

To accommodate the import fill proposed in these work sites, modifications to landowner's siphons and ramps may be required. For siphons, this would include raising the pipes through the levee crown such that the invert is above the Base Flood Elevation (BFE)/100 year flood plain elevation and modifying the landside sections of pipe to conform to the proposed slope work. Ramps will require raising, regrading and resurfacing to conform to the proposed finished grades of the improvements. Access roads will need to be maintained.

Review Process:

Preliminary data will be prepared by the Project Engineer. The SOW and budget will be prepared and submitted with the initial funding advance request to the DWR representative. Subsequent funding advances will be submitted with updated budgets and progress reports.

DWR and DFG will review the SOW and provide comments to the District. Revisions if required will be incorporated accordingly.

Upon approval of the SOW, the plans and specifications will be prepared and submitted to DWR for review. Revisions if required will be incorporated accordingly.

A site visit was conducted during the week of December 8th 2010, with DFG and DWR personnel. Upon approval of this SOW, DFG will provide AB360 mitigation requirements. The AB 360 pre-project form will be completed and submitted to DWR.

Permitting Issues:

The CEQA Notice of Exemption has been filed and the DWR Environmental Information form is included herewith.

To avoid any unusual circumstances that may arise during the project the following procedures will be followed:

- All riprap will be placed above the Ordinary High Water Mark (OHWM). Special care will be taken to avoid any material from falling into the waterway. All waterside riprap and planting work will be in compliance with DFG Streambed Alteration Agreement requirements.
- No onsite borrow sites will be used. Contractors will be required to provide materials
 meeting the engineering specifications from commercial sources. Dredged fill will not be
 allowed unless agreed to in writing by DWR and District.
- All impacts to habitat will be mitigated per the Delta levee program (AB 360) requirements.
- DFG will be allowed to review the work sites prior to the start of work to ascertain the quantity of AB 360 Habitat Mitigation that may be required. The District will expend funds from the work agreement to execute the mitigation.
- An independent CEQA determination by Kleinfelder, is enclosed herewith.

- A Baseline Biological Resources Assessment by Moore Biological is also enclosed herewith.
- As outlined in the Moore Biological resources assessment, the District will implement the projects biological Avoidance and Minimization measures (attached). The District will also provide pre-construction surveys for California black rail and Western pond turtles. Diane Moore will conduct all pre-construction surveys and conduct the worker awareness training. The worker awareness training conducted by Diane Moore will include cultural resources protection training. The training will include the need to allow animals to move outside the work areas on their own accord and the need to halt work in areas where artifacts are found.
- District has determined that a storm water discharge permit is not required in that the
 project is routine maintenance type work historically performed to maintain the original
 purpose of the levee system.
- Freshwater marsh impacted by toe ditch realignment or relocation will be fully mitigated as per DFG determinations. The toe drains in the project work areas are used for both irrigation and drainage and have been determined by the District to be exempt from USACE 404 requirements.

The District <u>has</u> prepared and submitted a Notification of Lake or Streambed Alteration, which was forwarded to the District's DFG representative, Mark Philipp, as well as the Regional Office Central Coast (Region 3) in Yountville, CA. This notification is the application to obtain a Streambed Alteration Agreement (SAA/1602permit).

Mitigation:

The DFG will determine the required AB360 mitigation requirements. Upon final approval of this SOW, DFG will calculate the quantity and type of mitigation required. The District will enter into agreements for purchase of mitigation credits at DFG approved Mitigation Banks. There is an allowance in the budget for mitigation.

Quality Assurance and Quality Control:

Material submittals and approval prior to job delivery.

Onsite inspection to assure the contractor is completing the work per the plans and specifications.

Meetings:

A prebid meeting and job walk will be held for prospective contractors.

A preconstruction meeting will be held at the beginning of the project between the Engineers and the successful contractor.

Meetings will be arranged as needed during construction.

Schedule of Work:

Following is a tentative schedule that reflects the project milestones.

<u>Description</u>	Start	Complete
Receive DWR Project Funding Agreement	Feb 28, 2011	
Field surveys	Jan 15, 2011	Dec 15, 2011
Develop initial plan and specifications	Jan 15, 2012	Feb 15, 2012
Site visit with DFG for preliminary planning		
of provisional work	Dec 08, 2010	Dec 08, 2010
Prepare Environmental/CEQA Information	Feb 2, 2011	Nov 15, 2011
Prepare SOW	Feb 2, 2011	Nov 15, 2011
Notification of Streambed Alteration	Feb 15, 2011	Nov 20, 2011
Process Streambed Alteration Agreement	Nov 20, 2011	Dec 15 , 2011
Request initial advance funding	Mar 07, 2011	
Approve SOW/CEQA Exemption	Nov 15, 2011	Dec 25, 2011
Delta Stewardship Council approval	Nov 20, 2011	Dec 25, 2011
Prepare final plans and specifications (P/S)	Dec 15, 2011	Jan 15, 2012
DWR review of P/S	Jan 15, 2012	Feb 15, 2012
DWR Process and advance funding	Jan 15, 2012	Feb 15, 2012
Advertise and Bid construction project	Mar 1, 2012	Mar15, 2012
Award contract	Mar 15, 2012	Apr 15, 2012
Construct project(s)	Apr 20, 2012	June 30, 2013
As built report(s)	June 30, 2012	June 30, 2013

Budget:

Attached to this SOW is the budget which reflects the estimated costs for the project. In the event that competitive bids are received that are lower than the estimated budget, additional fill will be proposed to be placed within the prescribed template (s). Conversely, if the bids are more than the estimate or if the quantities are understated, less fill will be placed at the PL84-99 slope locations.

On behalf of Reclamation District 2024 thank you for assisting with the continued upgrade to the Districts flood control works. If you have any questions regarding this Scope of Work, please contact me at greenmountaindom@hotmail.com or phone (209) 478-6525.

Green Moûntain Engingering

Dominick Gulli PE, PLS District Engineer

Attachments:

Environmental Information Form SOW Budget Work Area Drawing Typical Cross sections Kleinfelder Inc. Confirmation of CEQA determination Moore Biological Baseline Biological Resources assessment USFWS Species list and CNDDB Photos

CC: Dante John Nomellini Kleinfelder Moore Biological Chris Neudeck

RECLAMATION DISTRICT NO. 2039

235 East Weber Avenue P.O. Box 1461 Stockton California 95201 (209) 465-5883 FAX (209) 465-3956

Steve Barsoom, President James Barsoom, Trustee Jaime DeFremery, IV, Trustee Kurt Sharp, Trustee Al Tassano, Trustee Dante John Nomellini, Secretary

Dominick Gulli, District Engineer

Department Of Water Resources (DWR) 1416 Ninth Street Room 1601

Sacramento CA 94236-0001

PO Box 942836

12/21/11

Phone 916-651-0855 Fax: 916-651-9678

Attn:

Karimi Arao

email: sarao@water.ca.gov

Re:

Reclamation District 2039 Upper Jones Tract

Work Agreement UJ 10-2.0 Scope of Work (SOW)

Introduction:

The project defined in this Scope of Work (SOW) consists of upgrading the Upper Jones Tract Levee by: (1) Placing seepage and stability berms (2) Constructing portions of the PL84-99 slopes for slope stability and seepage control; (3) Placing waterside slope protection above the ordinary high water mark (4) construction of a setback back levee to allow for waterside plantings for habitat enhancement and planting of trees. The general scope of services is consistent to that outlined in the Proposal Solicitation Package (PSP) submitted to Department of Water Resources (DWR) as amended on April 5, 2010. Levee materials will be imported to the jobsite with truck or marine based equipment and barges.

Since the time of the PSP submittal, the District has made progress toward its 5 year plan by surveying more detailed cross sections to supplement the Lidar data provided by DWR. The Department of Fish and Game (DFG) habitat logs have been input into a spreadsheet, and a better determination of assets protected and areas of concern has been made. The District has performed levee construction and maintenance between station 100+00 and 120+00 and repaired waterside sloughing in areas which were the most in need of repair. This work is partially funded through the DWR subventions program.

Personnel:

DWR Project Engineer:

Karimi Arao

District Engineer:

Dominick Gulli PE, PLS

1 of 7

Construction Manager Kjeldsen, Sinnock and Neudeck, Inc.

Chris Neudeck PE

District Secretary

Dante John Nomellini

DFG Representative CEQA Consultant

Mark Philipp Kleinfelder

Trevor Smith

Environmental Biologist

Moore Biological

Diane Moore

Work and Services:

The work consists of levee repairs including toe berm construction, waterside slope protection, landside back slope work toward the PL 84-99 slope, a setback levee to allow Habitat Enhancement along the waterside of the levee and planting of trees. Following are the procedures to be used to construct the works.

- A majority of the existing topography has been completed.
- A field visit with the DFG Representative has been made to determine any potential AB 360 impacts.
- Environmental consultants have been retained to assist with CEQA compliance and endangered species avoidance measures.
- Cross section data will be used to calculate quantities.
- · Plans and specifications will be prepared.
- The Notice to Contractors will be published in a public newspaper in accordance with the public contracting code.
- The Notice to Contractors will also be forwarded to prospective contractors.
- A job walk will be held to show the project to prospective contractors.
- Addendums will be issued if clarification on the plans and specifications is required.
- The bids will be received and opened in public.
- The bids will be reviewed for completeness by the Project Engineer, District Engineer and District Secretary.
- A contract will be awarded to the lowest responsible bidder.
- Upon receipt of the required contract documents, a Notice to Proceed will be issued to the contractor.
- The improvements will be staked by the Project Engineer.
- All construction material such as import fill, rip rap and aggregate base will be delivered to the work site by truck or marine equipment, and will be paid for by the ton.
- The Construction Manager will ensure that the project is being constructed per the plans and specifications.
- Contractor progress payments will be reviewed on a monthly basis by the Engineers and reported to the District and DWR for payment.
- An as-built report will be prepared at the conclusion of each completed portion of the work.
- The District shall not deviate from this SOW without prior consultation with DWR and the Department of Fish and Game staff.
- The work will be performed in accordance with the public contracting code.
- The District has consulted with the DWR and DFG on the plant list and spacing. District will
 coordinate with DWR and DFG as to the specific locations for planting each plant species.

Work Areas:

The PSP work areas originally proposed will be the basis of the scope of work. Enclosed is a map illustrating the work areas.

The Work Areas are specified as follows:

Seepage/stability toe berms Work Area 1

At areas that have soft and moist peat, seepage stability berms will be constructed.

Stations 100+00 to 120+00 135+00 to 150+00 175+00 to 194+00 215+00 to 250+00 Length = 8,900 lf

PL 84-99 slope Work Area 2

The lower lifts of the PL84-99 toe berm/slope will be installed in approximate 4 ft thick lifts at a rate of about 12-16 tons/lf. The practice is to allow a complete lift to rest for a minimum of 15-30 days to monitor prior to placing additional lifts.

Stations 90+00 to 152+00 Length = 6,200 lf

Slope Protection Work Area 3

Approximately 20,000 tons of riprap slope protection will be placed at intermittent stations between levee stations 90+00 240+00 at an application rate of approximately 1-2 ton per lineal foot, to be placed as needed to protect the fills and to supplement the existing quarry stone slope protection.

The PSP did not identify specific stations for slope protection. Fish and Game requires specific stations for Notification of a Streambed alteration and the specific stations are listed on the table on the enclosed map.

Habitat Enhancement Setback Levee Work Area 4

An oversized "setback levee" will be constructed between levee stations 110+00 to 126+00 that will shift the PL 84-99 template landward to allow tree plantings outside of the PL84-99 levee template. The trees will be planted within slope protection above the OHWM as per conditions approved with the DFG Streambed Alteration Agreement. Quarry stone slope protection will be used to protect the habitat area and the vegetation it supports. These trees will provide shaded riverine aquatic habitat enhancement. District has consulted with DWR and DFG regarding the plant list and any changes will be subject to the approval of DWR and DFG. District will coordinate with DWR and DFG as to the specific locations for planting each plant species. The oversized levee will enhance emergency preparation by providing better access for trucks, more room for flood fighting including repair of beaver holes and increase the ability to raise the levee during flood fights while maintaining two way access.

The project solicitation package was based on the PL 84-99 slope being constructed. The completion of all work is dependent upon funding, permitting, and contract completion date constraints. The District will coordinate with the DWR and DFG to satisfactorily implement this project component.

The fill will be placed in lifts similar to the PL 84-99 slope described above.

Ancillary Work

To accommodate the import fill proposed in these work sites, modifications to landowner's siphons and ramps may be required. For siphons, this would include replacing the sections that conflict with the slope work, raising the pipes through the levee crown such that the invert is above the Base Flood Elevation (BFE)/100 year flood plain elevation and replacing the landside sections of pipe to conform to the proposed slope work. Ramps will require raising, regrading and resurfacing to conform to the proposed finished grades of the improvements. Access roads will need to be maintained.

Review Process:

Preliminary data will be prepared by the Project Engineer. The SOW and budget will be prepared and submitted with the initial funding advance request to the DWR representative. Subsequent funding advances will be submitted with updated budgets and progress reports.

DWR and DFG will review the SOW and provide comments to the District. Revisions if required will be incorporated accordingly.

Upon approval of the SOW, the plans and specifications will be prepared and submitted to DWR for review. Revisions if required will be incorporated accordingly.

A site visit was conducted during the week of December 8th 2010, with DFG and DWR personnel. Upon approval of this SOW, DFG will provide AB360 mitigation requirements. The AB 360 pre-project form will be completed and submitted to DWR.

Permitting Issues:

The CEQA Notice of Exemption has been filed and the DWR Environmental Information form is included herewith.

To avoid any unusual circumstances that may arise during the project the following procedures will be followed:

 All riprap will be placed above the Ordinary High Water Mark (OHWM). Special care will be taken to avoid any material from falling into the waterway. All waterside riprap and planting work will be in compliance with DFG Streambed Alteration Agreement requirements.

- No onsite borrow sites will be used. Contractors will be required to provide materials
 meeting the engineering specifications from commercial sources. Dredged fill will not be
 allowed unless agreed to in writing by DWR and District.
- All impacts to habitat will be mitigated per the Delta levee program (AB 360) requirements.
- DFG will be allowed to review the work sites prior to the start of work to ascertain the
 quantity of AB 360 Habitat mitigation that may be required. The District will expend
 funds from the work agreement to execute the mitigation.
- · An independent CEQA determination by Kleinfelder, is enclosed herewith.
- A Baseline Biological Resources Assessment by Moore Biological is also enclosed herewith.
- As outlined in the Moore Biological resources assessment, the District will implement the projects biological Avoidance and Minimization Measures (attached). The District will also provide pre-construction surveys for California black rail and Western pond turtles. Diane Moore will conduct all pre-construction surveys and conduct the worker awareness training. The worker awareness training conducted by Diane Moore will include cultural resources protection training. The training will include the need to allow animals to move outside the work areas on their own accord and the need to halt work in areas where artifacts are found.
- District has determined that a storm water discharge permit is not required in that the
 project is routine maintenance type work historically performed to maintain the original
 purpose of the levee system.
- Freshwater marsh impacted by toe ditch realignment or relocation will be fully mitigated
 as per DFG determinations. The toe drains in the project work areas are used for both
 irrigation and drainage and have been determined by the District to be exempt from
 USACE 404 requirements.

The District has prepared and submitted a Notification of Lake or Streambed Alteration, which was forwarded to the District's DFG representative, Mark Philipp, as well as the Regional Office Central Coast (Region 3) in Yountville, CA. This notification is the application to obtain a Streambed Alteration Agreement (SAA/1602permit).

Mitigation:

The DFG will determine the required AB360 mitigation requirements. Upon final approval of this SOW, DFG will calculate the quantity and type of mitigation required. The District will enter into agreements for purchase of mitigation credits at DFG approved Mitigation Banks. There is an allowance in the budget for mitigation.

Quality Assurance and Quality Control:

Material submittals and approval prior to job delivery.

Onsite inspection to assure the contractor is completing the work per the plans and specifications.

Meetings:

A prebid meeting and job walk will be held for prospective contractors.

A preconstruction meeting will be held at the beginning of the project between the Engineers and the successful contractor.

Meetings will be arranged as needed during construction.

Schedule of Work:

Following is a tentative schedule that reflects the project milestones.

<u>Description</u>	Start	Complete
Receive DWR Project Funding Agreement	Feb 28, 2011	
Field surveys	Jan 15, 2011	Dec 15, 2011
Develop initial plan and specifications	Jan 15, 2012	Feb 15, 2012
Site visit with DFG for preliminary planning		
of provisional work	Dec 08, 2010	Dec 08, 2010
Prepare Environmental/CEQA Information	Feb 2, 2011	Nov 5, 2011
Prepare SOW	Feb 2, 2011	Nov 5, 2011
Notification of Streambed Alteration	Feb 15, 2011	Nov 20, 2011
Process Streambed Alteration Agreement	Nov 20, 2011	Dec 1, 2011
Request initial advance funding	Mar 07, 2011	
Approve SOW/CEQA Exemption	Nov 5, 2011	Nov 20, 2011
Delta Stewardship Council approval	Nov 20, 2011	Dec 15, 2011
Prepare final plans and specifications (P/S)		Jan 15, 2012
DWR Process and advance funding	Jan 15, 2012	Feb 15, 2012
Advertise and Bid construction project	Mar 1, 2012	Mar15, 2012
Award contract	Mar 15, 2012	Apr 15, 2012
Construct project(s)	Apr 20, 2012	June 30, 2013
As built report(s)	June 30, 2012	June 30, 2013

Budget:

Attached to this SOW is the budget which reflects the estimated costs for the project. In the event that competitive bids are received that are lower than the estimated budget, additional fill will be proposed to be placed within the prescribed template (s). Conversely, if the bids are more than the estimate or if the quantities are understated, less fill will be placed at the PL84-99 slope locations.

On behalf of Reclamation District 2039 thank you for assisting with the continued upgrade to the Districts flood control works. If you have any questions regarding this Scope of Work, please contact me at greenmountaindom@hotmail.com or phone (209) 478-6525. Green Mountain Engineering

MI OF 1

Dominick Gulli PE, PLS District Engineer

Attachments:

Environmental Information Form SOW Budget Work Area Drawing Typical Cross sections Kleinfelder Inc. Confirmation of CEQA determination Moore Biological Baseline Biological Resources assessment USFWS Species list and CNDDB Photos

CC: Dante John Nomellini Kleinfelder Moore Biological Chris Neudeck

RECLAMATION DISTRICT NO. 2072

235 East Weber Avenue P.O. Box 1461 Stockton California 95201 (209) 465-5883 FAX (209) 465-3956

Trustees

Coleman Foley, Pres. Peter Lucchesi Kurt Sharp Secretary and Attorney
Dante John Nomellini

District Engineer Dominick Gulli

Department Of Water Resources (DWR)

1416 Ninth Street Room 1601 Sacramento CA 94236-0001

PO Box 942836

12/21/11

Phone 916-651-0855 Fax: 916-651-9678

Attn: A Felipe Garcia

afgarcia@water.ca.gov

Re:

Reclamation District 2072 Woodward Island

Work Agreement WD-10-2.0 Scope of Work (SOW)

Introduction:

The project defined in this Scope of Work (SOW) consists of upgrading the Woodward Island Levee by: (1) raising and widening the crown of the levee (2) constructing portions of the PL84-99 slopes for slope stability and seepage control; (3) construction of a setback back levee to allow for waterside plantings for habitat enhancement; (4) providing stockpiles of emergency levee materials (Riprap and Aggregate Base (AB)) and (5) planting habitat. The general scope of services is consistent to that outlined in the Proposal Solicitation Package (PSP) submitted to Department of Water Resources (DWR) as amended on April 7, 2010. Levee materials will be imported to the jobsite with Marine based equipment and barges.

Since the time of the PSP submittal, the District has made progress toward its 5 year plan by surveying more detailed cross sections to supplement the Lidar data provided by DWR. The Department of Fish and Game (DFG) habitat logs have been input into a spreadsheet, and a better determination of assets protected and areas of concern has been made. The District has performed levee construction and maintenance which raised the levee crown above the HMP elevation from station 140+00 to 210+00, and installed a portion of the PL84-99 slope from station 205+00 to 212+00. This work is partially funded through the DWR subventions program.

Personnel:

DWR Project Engineer:

A Felipe Garcia

District Engineer:

Dominick Gulli PE, PLS

Construction Manager

Kieldsen, Sinnock and Neudeck, Inc.

Chris Neudeck PE

District Secretary

Dante John Nomellini

DFG Representative CEQA Consultant

Mark Philipp Kleinfelder

Trevor Smith

Environmental Biologist

Moore Biological Diane Moore

Work and Services:

The work consists of levee repairs including crown raising, waterside slope protection, landside back slope work toward the PL 84-99 slope, a setback levee to allow Habitat Enhancement along the waterside of the levee, planting of trees and emergency material stockpiles. Following are the procedures to be used to construct the works.

- A majority of the existing topography has been completed.
- A field visit with the DFG Representative has been made to determine any potential AB 360 impacts.
- Environmental consultants have been retained to assist with CEQA compliance and endangered species avoidance measures.
- Cross section data will be used to calculate quantities.
- Plans and specifications will be prepared.
- The Notice to Contractors will be published in a public newspaper in accordance with the public contracting code.
- The Notice to Contractors will also be forwarded to prospective contractors.
- A job walk will be held to show the project to prospective contractors.
- Addendums will be issued if clarification on the plans and specifications is required.
- The bids will be received and opened in public.
- The bids will be reviewed for completeness by the Project Engineer, District Engineer and District Secretary.
- · A contract will be awarded to the lowest responsible bidder.
- Upon receipt of the required contract documents, a Notice to Proceed will be issued to the contractor.
- The improvements will be staked by the Project Engineer.
- All construction material such as import fill, rip rap and aggregate base will be delivered
 to the work site by floating equipment, and will be paid for by the ton.
- The Construction Manager will ensure that the project is being constructed per the plans and specifications.
- Contractor progress payments will be reviewed on a monthly basis by the Engineers and reported to the District and DWR for payment.
- An as-built report will be prepared at the conclusion of each completed portion of the work.
- The District shall not deviate from this SOW without prior consultation with DWR and Department of Fish and Game staff.
- The work will be performed in accordance with the public contracting code.
- The District has consulted with the DWR and DFG on the plant list and spacing. District will coordinate with DWR and DFG as to the specific locations for planting each plant species.

Work Areas:

The PSP work areas originally proposed will be the basis of the scope of work. Enclosed is a map illustrating the work areas.

The Work Areas are specified as follows:

Crown Raising Work area 1:

At areas that the levee is below the District standard elevation the crown will be raised to elevation 9.5 and widened to 22 ft width. The work will be performed at the following stations:

Stations 1+00 to 100+00, 130+00 to 230+00*, 357+00 to 362+00, 395+00 to 405+00, 455+00 to 465+00

Length = 22,500 lf *14,500 lf

Note: Stations 130+00 to 210+00 were completed recently under the subventions program.

Lower Lifts of PL 84-99 Slopes Work Area 2

The lower lifts of the PL84-99 toe berm/slope will be installed in approximate 4 ft thick lifts at a rate of about 12-16 tons/lf. The practice is to allow a complete lift to rest for a minimum of 30 days to monitor prior to placing additional lifts.

South Levee Stations 140+00 to 260+00 Length = 12,000 lf

West Levee Stations 260+00 to 385+00 Length = 12,500 lf

Habitat Enhancement Work Area 3

An oversized "setback levee" will be constructed between levee stations 360+00 to 370+00 that will shift the PL 84-99 template landward to allow tree plantings outside of the PL84-99 levee template. The trees will be planted within slope protection above the OHWM as per conditions approved with the DFG Streambed Alteration Agreement. Quarry stone slope protection will be used to protect the habitat area and the vegetation it supports. These trees will provide shaded riverine aquatic habitat enhancement. District has consulted with DWR and DFG regarding the plant list and any changes will be subject to the approval of DWR and DFG. District will coordinate with DWR and DFG as to the specific locations for planting each plant species. The oversized levee will enhance emergency preparation by providing better access for trucks, more room for flood fighting including repair of beaver holes and increase the ability to raise the levee during flood fights while maintaining two way access.

The project solicitation package was based on the PL 84-99 slope being constructed. The completion of all work is dependent upon funding, permitting, and contract completion date

constraints. The District will coordinate with the DWR and DFG to satisfactorily implement this project component.

The fill will be placed in lifts similar to the PL 84-99 slope described above.

Emergency Preparation Work Area 4

The District will stockpile materials for potential future emergency levee conditions. Quarry Stone Rip Rap and Aggregate base will be offloaded by barge and stockpiled near levee station 135+00.

Slope Protection Work Area 5

The PSP included Rock slope protection as part of the crown-raising item of work. This slope protection is to armor the newly placed fills. It has been separated out for this SOW for better clarification and conformance with the streambed alteration application. Approximately 2,000 tons of riprap slope protection will be placed between levee stations 340+00 390+00 at an application rate of approximately 1 ton per lineal foot, to be placed as needed to protect the fills and to supplement the existing quarry stone slope protection.

The PSP did not identify specific stations for slope protection. Fish and Game requires specific stations for Notification of a Streambed alteration and the specific stations are listed on the table on the enclosed map.

Ancillary Work

To accommodate the import fill proposed in these work sites, modifications to landowner's siphons and ramps may be required. For siphons, this would include raising the pipes through the levee crown such that the invert is above the Base Flood Elevation (BFE)/100 year flood plain elevation and modifying the landside sections of pipe to conform to the proposed slope work. Ramps will require raising, regrading and resurfacing to conform to the proposed finished grades of the improvements. Access roads will need to be maintained.

Review Process:

Preliminary data will be prepared by the Project Engineer. The SOW and budget will be prepared and submitted with the initial funding advance request to the DWR representative. Subsequent funding advances will be submitted with updated budgets and progress reports.

DWR and DFG will review the SOW and provide comments to the District. Revisions if required will be incorporated accordingly.

Upon approval of the SOW, the plans and specifications will be prepared and submitted to DWR for review. Revisions if required will be incorporated accordingly.

A site visit was conducted during the week of December 8th 2010, with DFG and DWR personnel. Upon approval of this SOW, DFG will provide AB360 mitigation requirements. The AB 360 pre-project form will be completed and submitted to DWR.

Permitting Issues:

The CEQA Notice of Exemption has been filed and the DWR Environmental Information form is included herewith.

To avoid any unusual circumstances that may arise during the project the following procedures will be followed:

- All riprap will be placed above the Ordinary High Water Mark (OHWM) Special care will be taken to avoid any material from falling into the waterway. All waterside riprap and planting work will be in compliance with DFG Streambed Alteration Agreement requirements.
- No onsite borrow sites will be used. Contractors will be required to provide materials
 meeting the engineering specifications from commercial sources. Dredged fill will not be
 allowed unless agreed to in writing by DWR and District.
- All impacts to habitat will be mitigated per the Delta levee program (AB 360) requirements.
- DFG will be allowed to review the work sites prior to the start of work to ascertain the
 quantity of AB 360 Habitat Mitigation that may be required. The District will expend
 funds from the work agreement to execute the mitigation.
- · An independent CEQA determination by Kleinfelder, is enclosed herewith.
- A Baseline Biological Resources Assessment by Moore Biological is also enclosed herewith.
- As outlined in the Moore Biological resources assessment, the District will implement the projects biological Avoidance and Minimization measures (attached). The District will also provide pre-construction surveys for California black rail and Western pond turtles. Diane Moore will conduct all pre-construction surveys and conduct the worker awareness training. The worker awareness training conducted by Diane Moore will include cultural resources protection training. The training will include the need to allow animals to move outside the work areas on their own accord and the need to halt work in areas where artifacts are found.
- District has determined that a storm water discharge permit is not required in that the
 project is routine maintenance type work historically performed to maintain the original
 purpose of the levee system.
- Freshwater marsh impacted by toe ditch realignment or relocation will be fully mitigated as per DFG determinations. The toe drains in the project work areas are used for both irrigation and drainage and have been determined by the District to be exempt from USACE 404 requirements.

The District has prepared and submitted a Notification of Lake or Streambed Alteration, which was forwarded to the District's DFG representative, Mark Philipp, as well as the Regional Office Central Coast (Region 3) in Yountville, CA. This notification is the application to obtain a Streambed Alteration Agreement (SAA/1602permit).

Mitigation:

The DFG will determine the required AB360 mitigation requirements. Upon final approval of this SOW, DFG will calculate the quantity and type of mitigation required. The District will enter into agreements for purchase of mitigation credits at DFG approved Mitigation Banks. There is an allowance in the budget for mitigation.

Quality Assurance and Quality Control:

Material submittals and approval prior to job delivery.

Onsite inspection to assure the contractor is completing the work per the plans and specifications.

Meetings:

A prebid meeting and job walk will be held for prospective contractors.

A preconstruction meeting will be held at the beginning of the project between the Engineers and the successful contractor.

Meetings will be arranged as needed during construction.

Schedule of Work:

Following is a tentative schedule that reflects the project milestones.

Description	Start	Complete
Receive DWR Project Funding Agreement Field surveys Develop initial plan and specifications	Feb 28, 2011 Jan 15, 2011 Jan 15, 2012	Dec 15, 2011 Feb 15, 2012
Site visit with DFG for preliminary planning of provisional work	Dec 08, 2010	Dec 08, 2010
Prepare SOW	Feb 2, 2011 Feb 2, 2011	Nov 5, 2011 Nov 5, 2011
Notification of Streambed Alteration Process Streambed Alteration Agreement Request initial advance funding	Feb 15, 2011 Nov 20, 2011 Mar 07, 2011	Nov 20, 2011 Dec 1 , 2011
Approve SOW/CEQA Exemption Delta Stewardship Council approval	Nov 5, 2011 Nov 20, 2011	Nov 20, 2011 Dec 15, 2011
Prepare final plans and specifications (P/S) DWR review of P/S DWR Process and advance funding	Dec 15, 2011 Jan 15, 2012 Jan 15, 2012	Jan 15, 2012 Feb 15, 2012 Feb 15, 2012
Advertise and Bid construction project Award contract Construct project(s) As built report(s)	Mar 1, 2012 Mar 15, 2012 Apr 20, 2012 June 30, 2012	Mar15, 2012 Apr 15, 2012 June 30, 2013 June 30, 2013

Budget:

Attached to this SOW is the budget which reflects the estimated costs for the project. In the event that competitive bids are received that are lower than the estimated budget, additional fill will be proposed to be placed within the prescribed template (s). Conversely, if the bids are more than the estimate or if the quantities are understated, less fill will be placed at the PL84-99 slope locations.

On behalf of Reclamation District 2072 thank you for assisting with the continued upgrade to the Districts flood control works. If you have any questions regarding this Scope of Work, please contact me at greenmountaindom@hotmail.com or phone (209) 478-6525. Green Mountain Engineering

Dominick Gulli PE, PLS

District Engineer

Attachments:

Environmental Information Form
SOW Budget
Work Area Drawing
Typical Cross sections
Kleinfelder Inc. Confirmation of CEQA determination
Moore Biological Baseline Biological Resources assessment
USFWS Species list and CNDDB
Photos

CC: Dante John Nomellini

Kleinfelder Moore Biological Chris Neudeck

RECLAMATION DISTRICT NO. 684

235 East Weber Avenue P.O. Box 1461 Stockton, California 95201 (209) 465-5883 FAX (209) 465-3956

Trustees
John Armanino

Robert Giovannoni

Kurt Sharp

Secretary and Attorney Dante John Nomellini

Engineer

Dominick Gulli

Department of Water Resources (DWR)

1416 Ninth Street

Sacramento, CA 94236-0001

P.O. Box 942836

December 21, 2011

Phone: 916-651-0837 Fax: 916-651-9678

Attn: A. Felipe Garcia

email: afgarcia@water.ca.gov

Re:

Reclamation District 684 Lower Roberts Island

Work Agreement RL-10-2.0 Scope of Work (SOW)

Introduction:

This project consists of upgrading the Lower Roberts Island Levee by (1) installing 16,400 lineal feet of PL84-99 slope and crown improvements at various locations between levee stationing 44+00 and 740+00; (2) installing 3,100 lineal feet of PL 84-99 Seepage and Stability Toe Berms Sites from levee stationing 236+00 to 267+00; (3) constructing 2,800 lineal feet of Habitat Enhancement Setback Levee related tree planting and placing 1000 tons of Quarry Stone Riprap from levee stationing 230+00 to 258+00. The general scope of services is consistent with that outlined in the Project Solicitation Package (PSP) submitted on behalf of Lower Roberts Island to DWR in April of 2010.

Since the time of the PSP the District has successfully bid and awarded the construction contract for the RL-10-1.0 project which includes HMP improvements, crown raising, waterside slope protection improvements, and habitat setback enhancement improvements. Construction has commenced.

Personnel:

DWR Project Engineer:

A. Felipe Garcia

District Engineer:

Dominick Gulli, PE, PLS

Project Engineer:

Kjeldsen, Sinnock & Neudeck, Inc.

Chris Neudeck, PE

Construction Manager:

Kjeldsen, Sinnock & Neudeck, Inc.

District Secretary:

Dante John Nomellini

DFG Representative:

Mark Philipp

CEQA Consultant:

Kleinfelder Trevor Smith

Environmental Biologist:

Moore Biological

Diane Moore

Work and Services:

The work consists of levee repairs including crown and back slope work toward the PL 84-99 levee template, seepage and stability toe berms, and Habitat Enhancement Setback Levee including tree planting and quarry stone riprap. Following are the procedures to be used to design and construct the works.

- A majority of the existing topography has been completed.
- A field visit with the DFG Representative has been made to determine any potential AB 360 impacts.
- Environmental consultants have been retained to assist with CEQA compliance and endangered species avoidance measures.
- Plans and specifications will be prepared.
- Cross section data will be used to calculate quantities.
- The Notice to Contractors will be published in a public newspaper in accordance with the public contracting code.
- The Notice to Contractors will also be forwarded to prospective contractors.
- A pre-bid job walk will be held to show the project to prospective contractors.
- Addenda will be issued if clarification on the plans and specifications is required.
- The bids will be received and opened in public.
- The bids will be reviewed for completeness by the Project Engineer, District Engineer and District Secretary.
- A contract will be awarded to the lowest responsive, responsible bidder.
- Upon receipt of the required contract documents, a Notice to Proceed will be issued to the contractor.
- The improvements will be staked by the Project Engineer.
- All construction material such as import fill, riprap and aggregate base will be delivered to the work site by trucks or marine equipment and will be paid for by the ton.
- The Construction Manager will ensure that the project is being constructed per the plans and specifications.
- Contractor progress payments will be reviewed on a monthly basis by the Engineers and reported to the District and DWR for payment.
- An as-built report will be prepared at the conclusion of each completed portion of the work.
- The District shall not deviate from this SOW without prior consultation with DWR and the Department of Fish and Game staff.
- The work will be performed in accordance with the public contracting code.
- The District has consulted with DWR and DFG regarding the plant list and spacing. District will coordinate with DWR and DFG as to the specific locations for planting each plant species.

Work Areas:

The PSP work areas originally proposed will be the basis of the scope of work. Enclosed is a map illustrating work areas.

PL 84-99 Slope & Crown Work

Work Areas: WA-1, WA-1a, WA-1b, WA-1c, WA-1d, WA-1e, WA-1f, WA-1g, WA-1h,

WA-1i, WA-1j, WA-1k, WA-11

The lower lifts of the PL 84-99 slope work will be installed in approximate 4 foot thick lifts at a rate of about 12-16 tons/lf. The practice is to allow a complete lift to rest for a minimum of 2 weeks to monitor prior to placing additional lifts. Crown raising consists of scarifying and removing the existing road surface material. The existing surfacing material will be blended in with import fill and placed and compacted to the required elevation.

Levee Stations:

44+00 to 58+00, 74+00 to 78+00, 106+00 to 124+00, 134+00 to 148+00, 170+00 to 182+00, 236+00 to 256+00, 328+00 to 342+00, 352+00 to 360+00, 364+00 to 376+00, 524+00 to 530+00, 656+00 to 662+00, 678+00 to 696+00, and 726+00 to 740+00 Length: 16,400 ft.

PL 84-99 Seepage and Stability Toe Berm Sites

Work Area: WA-2

The lower lifts of the PL 84-99 Seepage/Stability toe berms will be installed beyond the toe of the PL 84-99 levee design slope in approximate 4 foot thick lifts at a rate of about 12-16 tons/lf. Encroachments on San Joaquin County roadways, PG&E power poles, and any other utilities will be addressed as necessary. The practice is to allow a complete lift to rest for a minimum of 2 weeks prior to placing additional lifts.

Levee Stations: 236+00 to 267+00 Length: 3,100 ft.

Habitat Enhancement Setback Levee

Work Area: WA-3

An oversized "setback levee" will be constructed to shift the PL 84-99 template landward to allow tree plantings outside of the PL 84-99 levee template. The trees will be planted within slope protection above the Ordinary High Water Mark as per conditions approved with the Department of Fish and Game's Streambed Alteration Permit. Quarry stone slope protection will be used to protect the habitat area and the vegetation it supports. The fill will be placed in lifts similar to the PL 84-99 slope described above. These trees will provide shaded riverine aquatic habitat enhancement. District has consulted with DWR and DFG regarding the plant list and any changes will be subject to the approval of DWR and DFG. District will coordinate with DWR and DFG as to the specific locations for planting each plant species. The oversized levee will enhance emergency preparation by providing better

access for trucks, more room for flood fighting including repair of beaver holes and increase the ability to raise the levee during flood fights while maintaining two way access.

Levee Stations: 230+00 to 258+00 Length: 2,800 ft.

Ancillary Work

To accommodate the import fill proposed in these work sites, modifications to landowner's siphons and ramps may be required. For siphons, this would include raising the pipes through the levee crown such that the invert is above the Base Flood Elevation (BFE)/100 year flood plain elevation and modifying the landside sections of pipe to conform to the proposed slope work. Ramps will require raising, re-grading and resurfacing to conform to the proposed slope work. Access roads will need to be maintained.

Review Process:

Preliminary data will be prepared by the Project Engineer. The SOW and budget will be prepared and submitted with the initial funding advance request to the DWR representative. Subsequent funding advances will be submitted with updated budgets and progress reports.

DWR and DFG will review the SOW and provide comments to the District. Revisions if required will be incorporated accordingly.

Upon approval of the SOW, the plans and specifications will be prepared and submitted to DWR for review. Revisions if required will be incorporated accordingly.

A site visit was conducted during the week of December 8, 2010 with DFG and DWR personnel. Upon approval of this SOW, DFG will provide AB360 mitigation requirements. The AB 360 pre-project form will be completed and submitted to DWR.

Permitting Issues:

The CEQA Notice of Exemption has been filed and the DWR Environmental Information form is included herewith.

To avoid any unusual circumstances that may arise during the project the following procedures will be followed:

- All riprap will be placed above the Ordinary High Water Mark (OHWM). Special care
 will be taken to avoid any material from falling into the waterway. All waterside riprap
 and planting work will be in compliance with DFG Streambed Alteration Agreement
 requirements.
- No onsite borrow sites will be used. Contractors will be required to provide materials
 meeting the engineering specifications from commercial sources. Dredged fill will not be
 allowed unless agreed to in writing by DWR and District.

- All impacts to habitat will be mitigated per the Delta levee program (AB 360) requirements.
- DFG will be allowed to review the work sites prior to the start of work to ascertain the
 quantity of AB 360 Habitat mitigation that may be required. The District will expend
 funds from the work agreement to execute the mitigation.
- An independent CEQA determination by Kleinfelder is enclosed herewith.
- A Baseline Biological Resources Assessment by Moore Biological is also enclosed herewith. As outlined in the Moore Biological resources assessment, the District will implement the projects biological Avoidance and Minimization measures (attached). The District will also provide pre-construction surveys for California black rail and Western pond turtles. Diane Moore will conduct all pre-construction surveys and conduct the worker awareness training. The worker awareness training conducted by Diane Moore will include cultural resources protection training. The training will include the need to allow animals to move outside the work areas on their own accord and the need to halt work in areas where artifacts are found.
- District has determined that a storm water discharge permit is not required in that the project is routine maintenance type work historically performed to maintain the original purpose of the levee system.
- Freshwater marsh impacted by toe ditch realignment or relocation will be fully mitigated
 as per DFG determinations. The toe drains in the project work areas are used for both
 irrigation and drainage and have been determined by the District to be exempt from
 USACE 404 requirements.

The District <u>has</u> prepared and submitted a Notification of Lake or Streambed Alteration, which was forwarded to the District's DFG representative, Mark Philipp, as well as the Regional Office Central Coast (Region 3) in Yountville, CA. This notification is the application to obtain a Streambed Alteration Agreement (SAA/1602permit).

Mitigation:

The DFG will determine all of the required AB360 mitigation requirements. Upon final approval of this SOW, DFG will calculate the quantity and type of mitigation required. The District will enter into agreements for purchase of mitigation credits at DFG approved Mitigation Banks. There is an allowance in the budget for mitigation.

Quality Assurance and Quality Control:

Material submittals and approval will be required prior to job delivery.

Onsite inspection will be performed to assure the contractor is completing the work per the plans and specifications.

Meetings:

A pre-bid meeting and job walk will be held for prospective contractors.

A preconstruction meeting will be held at the beginning of the project between the Engineers and the successful contractor.

Meetings will be arranged as needed during the construction.

Schedule of Work:

Following is a tentative schedule that reflects the project milestones.

Description	Start	Complete
Receive DWR Project Funding Agreement	Feb. 28, 2011	
Field Surveys	Jan. 15, 2011	
Develop initial plan and specifications	Jan. 15, 2011	
Site visit with DFG for preliminary planning	Dec. 8, 2011	
of provisional work		
Prepare Environmental/CEQA Information	Feb. 2, 2011	Nov. 17, 2011
Prepare SOW	Feb. 2, 2011	Nov. 17, 2011
Notification of Streambed Alteration	Feb. 15, 2011	Nov. 30, 2011
Process Streambed Alteration Agreement	Nov. 30, 2011	Dec. 30, 2011
Request initial advance funding	Mar. 7, 2011	• .
Approve SOW/CEQA Exemption	Nov. 15, 2011	Dec. 31, 2011
Delta Stewardship Council approval	Nov. 16, 2011	Dec. 31, 2011
Prepare final plans and specifications (P/S)	Dec. 15, 2011	Jan. 15, 2012
DWR review of P/S	Jan. 15, 2012	Feb. 15, 2012
DWR Process and advance funding	Jan. 15, 2012	Feb. 15, 2012
Advertise and Bid construction project	Mar. 15, 2012	Mar. 15, 2012
Award contract	Apr. 15, 2012	Apr. 15, 2012
Construction project(s)	Apr. 20, 2012	June 30, 2012
As Built report(s)	June 30, 2012	June 30, 2012

Budget

Attached to this SOW is the budget showing the SOW expected project costs, which reflects the estimated costs for the project. In the event that competitive bids are received that are lower than the estimated budget, additional fill will be proposed to be placed within the prescribed template(s). Conversely, if the bids are more than the estimate or if the quantities are understated, less fill will be placed at the PL 84-99 slope locations.

On behalf of Lower Roberts Island, Reclamation District 684, thank you for your assistance with upgrading of the District levee system.

If you have any questions regarding this Scope of Work, please contact me at greenmountaindom@hotmail.com or phone (209) 478-6525.

Green Mountain Engineering

Dominick Gulli PE, PLS

District Engineer

Attachments:

Environmental Information Form
SOW Budget
Work Area Drawing
Typical Cross Sections
Kleinfelder - Confirmation of CEQA determination
Moore Biological - Baseline Biological Resources assessment
USFWS Species list and CNDDB
Photos

CC: Dante John Nomellini
Kleinfelder-InSite Environmental
Moore Biological
Chris Neudeck